

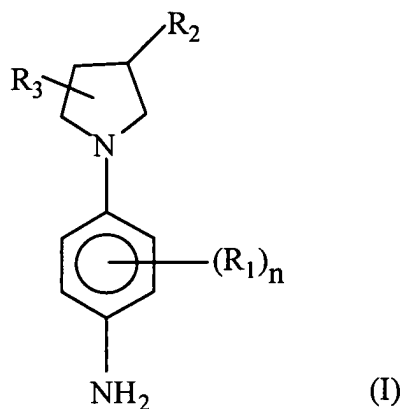
I. AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-45. (Canceled)

46. (Currently amended) A dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 2% by weight relative to the total weight of the composition of at least one pearlescent or ~~opaeyifying~~ opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R_1 may be identical or different,

R_1 represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C_1 - C_6 hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO_2 group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical R_1 not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R_2 represents an onium radical Z or a radical $-X-C=NR_8-NR_9R_{10}$ in which X represents an oxygen atom or a radical $-NR_{11}$ and R_8 , R_9 , R_{10} and R_{11}

represent a hydrogen atom, a C₁-C₄ alkyl radical or a C₁-C₄ hydroxyalkyl radical,

R₃ represents a hydrogen atom or a hydroxyl radical.

47. (Canceled)

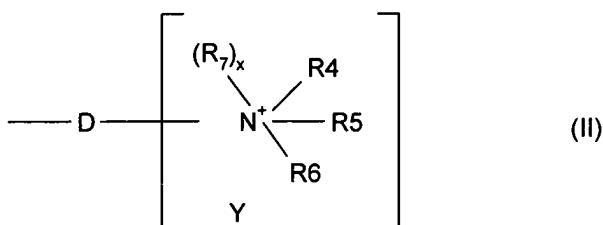
48. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

49. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

50. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

51. (Previously presented) The composition of claim 50, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

52. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



a. wherein:

b. D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and

which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

- c. R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical wherein the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or
- d. R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;
- e. R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;
- f. x is 0 or 1,
 - i. (New) when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

- ii. (New) when $x = 1$, then two of the radicals R_4 to R_6 form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring; and
- g. Y is a counter-ion.

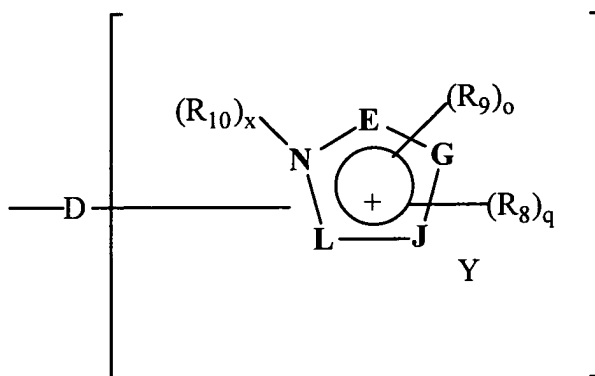
53. (Currently amended) The composition of claim [[51]] 52, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II wherein x is equal to 0 and R_4 , R_5 and R_6 separately are preferably chosen from a C_1 - C_6 alkyl radical, a C_1 - C_4 monohydroxyalkyl radical, a C_2 - C_4 polyhydroxyalkyl radical, a $(C_1$ - $C_6)$ alkoxy(C_1 - C_4)alkyl radical, a C_1 - C_6 amidoalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, or R_4 with R_5 form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl radical, a $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkyl carboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical.

54. (Currently amended) The composition of claim [[51]] 52, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II wherein x is equal to 1 and R_7 is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or a $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical; R_4 with R_5 together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyl alkyl radical; a C_1 - C_6 aminoalkyl radical; a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical.

55. (Currently amended) The composition of claim [[51]] 52, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

56. (Currently amended) The composition of claim [[51]] 52, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a trialkylammonium radical.

57. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula III



(III)

- h. wherein
- i. D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;
- j. the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring;
- k. q is an integer between 0 and 4 inclusive;
- l. is an integer between 0 and 3 inclusive;
- m. q+o is an integer between 0 and 4;
- n. the radicals R₈, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-

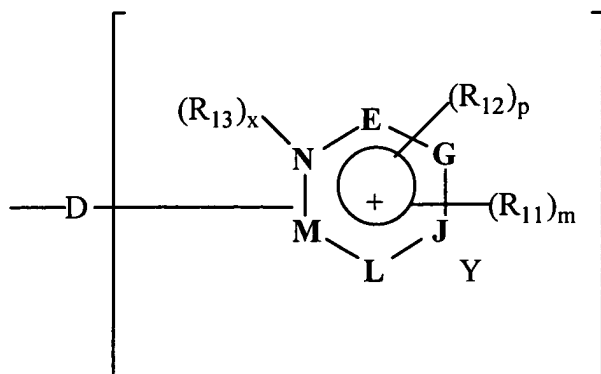
C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₈ are carried by a carbon atom;

- o. the radicals R₉, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical, it being understood that the radicals R₉ are carried by a nitrogen;
- p. R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;
- q. x is 0 or 1
 - i. (New) when x = 0, the linking arm D is attached to the nitrogen atom,
 - ii. (New) when x = 1, the linking arm D is attached to one of the vertices E, G, J or L; and
- r. Y is a counter-ion.

58. (Previously presented) The composition of claim 57, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

59. (Previously presented) The composition of claim 57, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

60. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that R_2 represents an onium radical Z corresponding to formula IV



(IV)

- b. wherein:
- c. D is a single bond or a linear or branched C1-C14 alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C1-C6 alkoxy or amino radicals, and which may carry one or more ketone functional groups;
- d. the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;
- e. p is an integer between 0 and 3 inclusive;
- f. m is an integer between 0 and 5 inclusive;
- g. p+m is an integer between 0 and 5;
- h. the radicals R_{11} , which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical, it being understood that the radicals R_{11} are carried by a carbon atom;

- i. the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical, it being understood that the radicals R₁₂ are carried by a nitrogen;
- j. R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;
- k. x is 0 or 1
 - i. (New) when x = 0, the linking arm D is attached to the nitrogen atom,
 - ii. (New) when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M; and
- l. Y is a counter-ion.

61. (Previously presented) The composition of claim 60, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

62. (Previously presented) The composition of claim 60, wherein the cationic tertiary paraphenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-

C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

63. (Previously presented) The composition of claim 60, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

64. (Previously presented) The composition of claim 60, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

65. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-)OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

66. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

67. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
- h. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
- i. [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
- j. {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- k. 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- l. 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- m. 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- n. 3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride
- o. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- p. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
- q. N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- r. N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
- s. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- t. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- u. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride

- v. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-dimethylammonium dichloride
- w. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
- x. {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- y. 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- z. 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}1-methyl-3H-imidazol-1-ium chloride
- aa. 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- bb. [1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- cc. 3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- dd. 3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- ee. [1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- ff. 3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- gg. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- hh. 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- ii. 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- jj. 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- kk. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- ll. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- mm. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride
- nn. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

oo. [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,
 pp. [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide
 qq. [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate
 rr. [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide
 ss. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 tt. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 uu. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 vv. [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 ww. [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 xx. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 yy. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride
 zz. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

68. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride;
- h. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- i. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
- j. N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- k. N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
- l. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

- m. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- n. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
- o. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- p. 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- q. 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- r. 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- s. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- t. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- u. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride
- v. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide
- w. [1-(4-Aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium iodide,
- x. [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium bromide
- y. [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium methosulphate
- z. [1-(4-aminophenyl)pyrrolidin-3-yl]butyl dimethylammonium iodide
- aa. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyl dimethylammonium iodide
- bb. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyl dimethylammonium iodide
- cc. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyl dimethylammonium iodide
- dd. [1-(4-aminophenyl)pyrrolidin-3-yl]octyl dimethylammonium iodide
- ee. [1-(4-aminophenyl)pyrrolidin-3-yl]decyl dimethylammonium iodide
- ff. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyl dimethylammonium iodide
- gg. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride
- hh. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

69. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
- h. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
- i. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- j. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- k. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- l. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride
- m. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide
- n. [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium iodide,
- o. [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium bromide
- p. [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium methosulphate
- q. [1-(4-aminophenyl)pyrrolidin-3-yl]butyl dimethylammonium iodide
- r. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyl dimethylammonium iodide
- s. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyl dimethylammonium iodide
- t. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyl dimethylammonium iodide
- u. [1-(4-aminophenyl)pyrrolidin-3-yl]octyl dimethylammonium iodide
- v. [1-(4-aminophenyl)pyrrolidin-3-yl]decyl dimethylammonium iodide
- w. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyl dimethylammonium iodide
- x. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride
- y. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

70. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
- b. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

- c. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- d. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

71. (Previously presented) The composition of claim 46, wherein the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

72. (Previously presented) The composition of claim 46, wherein the pearlescent or opacifying agent is an uncoated titanium oxide in powdered form.

73. (Previously presented) The composition of claim 72, wherein the pearlescent or opacifying agent is an uncoated titanium oxide in the form of an aqueous dispersion of at least 10% by weight of titanium oxide relative to the total weight of the aqueous dispersion and having a particle size equal to 15 to 60 nanometers.

74. (Previously presented) The composition of claim 46, wherein the pearlescent or opacifying agent is a titanium oxide coated with a material chosen from polydimethylsiloxane, polymethylhydrogenosiloxane, perfluoropolymethyl isopropyl ether, silica, teflon, polyester, chitosan, N-lauryl-L-lysine.

75. (Previously presented) The composition of claim 46, wherein the titanium oxide has a particle size of between 2 and 500 nanometers.

76. (Previously presented) The composition of claim 75, wherein the titanium oxide has a particle size of between 2 and 300 nanometers.

77. (Previously presented) The composition of claim 76, wherein the titanium oxide has a particle size of between 2 and 50 nanometers.

78. (Currently amended) The composition of claim 46, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from about 0.001 to about 10% by weight relative to the total weight of the composition.

79. (Currently amended) The composition of claim 78, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from about 0.005 to about 6% by weight relative to the total weight of the composition.

80. (Canceled)

81. (Currently amended) The composition of claim ~~[[80]]~~ 46, wherein the pearlescent or opacifying agent or agents represent from about 0.1% to about 1% by weight relative to the total weight of the composition.

82. (Previously presented) The composition of claim 46, further comprising at least one cationic polymer.

83. (Previously presented) The composition of claim 46, further comprising at least one thickening polymer.

84. (Previously presented) The composition of claim 46, further comprising at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.

85. (Previously presented) The composition of claim 46, comprising at least one additional oxidation base other than cationic tertiary para-phenylenediamines having a pyrrolidine ring chosen from para-phenylenediamines, bis-phenylalkylenediamines, para-aminophenols, ortho-aminophenols, heterocyclic bases and their addition salts.

86. (Currently amended) The composition of claim 85, wherein the additional oxidation base(s) are present in a quantity of between about 0.001 to about 20% by weight relative to the total weight of the composition.

87. (Currently amended) The composition of claim 86, wherein the additional oxidation base(s) are present in a quantity of between about 0.005 and about 6% by weight relative to the total weight of the composition.

88. (Previously presented) The composition of claim 46, further comprising at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.

89. (Previously presented) The composition of claim 88, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β -hydroxyethyloxy)benzene, 2-amino-4-(β -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1- β -hydroxyethylamino-3,4-methylenedioxybenzene, α -naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis(β -hydroxyethylamino)toluene and their addition salts.

90. (Currently amended) The composition of claim 89, wherein the coupler(s) are present in a quantity of between about 0.001 and about 20% by weight relative to the total weight of the composition.

91. (Currently amended) The composition of claim 90, wherein the coupler(s) are present in a quantity of between about 0.005 and about 6% by weight relative to the total weight of the composition.

92. (Previously presented) The composition of claim 46, further comprising at least one direct dye.

93. (Previously presented) The composition of claim 46, further comprising at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.

94. (Previously presented) The composition of claim 46, further comprising an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes.

95. (Previously presented) The composition of claim 94, wherein the oxidizing agent is hydrogen peroxide.

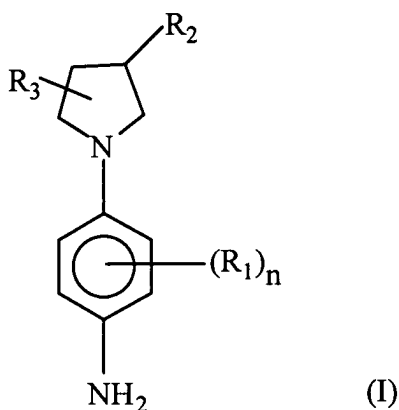
96. (Currently amended) A method for the oxidation dyeing of keratinous fibres, wherein a dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 2% by weight relative to the total weight of the composition of at least one pearlescent or ~~opa~~^{opacity}ifying

opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, is applied to the fibres in the presence of an oxidizing agent.

97. (Currently amended) A multicompartment device wherein the first compartment contains a dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 2% by weight relative to the total weight of the composition of at least one pearlescent or ~~opacifying~~ opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, and a second compartment contains an oxidizing agent.

98. (Canceled)

99. (New) A dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 10% by weight relative to the total weight of the composition of at least one pearlescent or opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R₁ may be identical or different,

R₁ represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO₂ group, and it being possible for the chain to be substituted with one or more hydroxyl or amino

radicals; an onium radical Z, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R₂ represents an onium radical Z or a radical $-X-C=NR_8-NR_9R_{10}$ in which X represents an oxygen atom or a radical $-NR_{11}$ and R₈, R₉, R₁₀ and R₁₁ represent a hydrogen atom, a C₁-C₄ alkyl radical or a C₁-C₄ hydroxyalkyl radical,

R₃ represents a hydrogen atom or a hydroxyl radical.

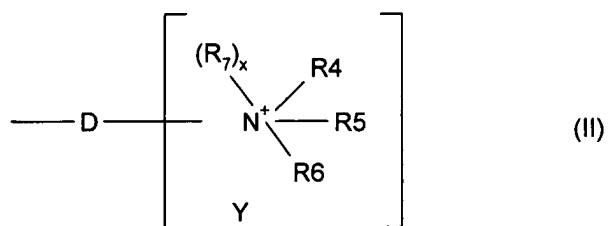
100. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

101. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

102. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

103. (New) The composition of claim 102, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

104. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



a. wherein:

- b. D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;
- c. R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical wherein the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or
- d. R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;
- e. R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;
- f. x is 0 or 1,

- i. (New) when $x = 0$, then the linking arm is attached to the nitrogen atom carrying the radicals R_4 to R_6 ;
- ii. (New) when $x = 1$, then two of the radicals R_4 to R_6 form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring; and
- g. Y is a counter-ion.

105. (New) The composition of claim 104, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II wherein x is equal to 0 and R_4 , R_5 and R_6 separately are preferably chosen from a C_1 - C_6 alkyl radical, a C_1 - C_4 monohydroxyalkyl radical, a C_2 - C_4 polyhydroxyalkyl radical, a $(C_1$ - $C_6)$ alkoxy(C_1 - C_4)alkyl radical, a C_1 - C_6 amidoalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, or R_4 with R_5 form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl radical, a $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkyl carboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl(C_1 - C_6)alkyl radical.

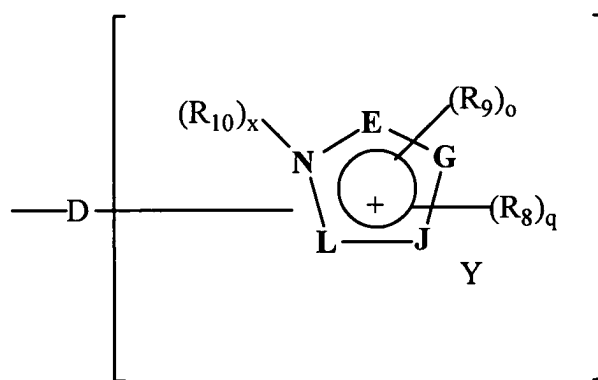
106. (New) The composition of claim 104, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II wherein x is equal to 1 and R_7 is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or a $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl(C_1 - C_6)alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl(C_1 - C_6)alkyl radical; R_4 with R_5 together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyl alkyl radical; a C_1 - C_6 aminoalkyl radical; a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy(C_1 -

C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical.

107. (New) The composition of claim 104, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

108. (New) The composition of claim 104, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a trialkylammonium radical.

109. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula III



(III)

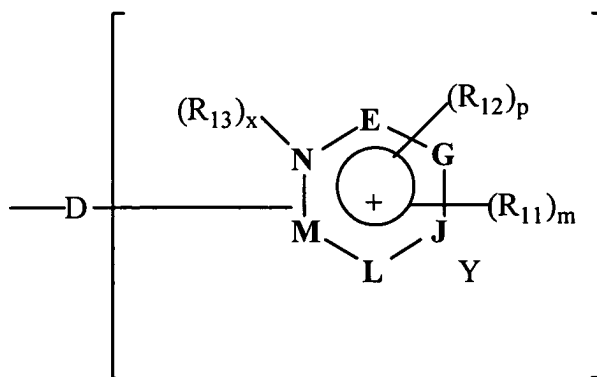
- h. wherein
- i. D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;
- j. the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring;
- k. q is an integer between 0 and 4 inclusive;
- l. is an integer between 0 and 3 inclusive;
- m. q+o is an integer between 0 and 4;

- n. the radicals R_8 , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 monohydroxyalkyl radical or a C_2 - C_6 polyhydroxyalkyl radical; it being understood that the radicals R_8 are carried by a carbon atom;
- o. the radicals R_9 , which are identical or different, represent a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical, a C_1 - C_6 carbamylalkyl radical, a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical, a benzyl radical, it being understood that the radicals R_9 are carried by a nitrogen;
- p. R_{10} represents a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carboxyalkyl radical; a C_1 - C_6 carbamylalkyl radical; a C_1 - C_6 trifluoroalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a C_1 - C_6 sulphonamidoalkyl radical; a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylsulphonamido(C_1 - C_6)alkyl radical;
- q. x is 0 or 1
 - i. (New) when $x = 0$, the linking arm D is attached to the nitrogen atom,
 - ii. (New) when $x = 1$, the linking arm D is attached to one of the vertices E, G, J or L; and
- r. Y is a counter-ion.

110. (New) The composition of claim 109, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

111. (New) The composition of claim 109, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

112. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents an onium radical Z corresponding to formula IV



(IV)

- b. wherein:
- c. D is a single bond or a linear or branched C1-C14 alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C1-C6 alkoxy or amino radicals, and which may carry one or more ketone functional groups;
- d. the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;
- e. p is an integer between 0 and 3 inclusive;
- f. m is an integer between 0 and 5 inclusive;
- g. p+m is an integer between 0 and 5;
- h. the radicals R₁₁, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is substituted with a (C₁-C₆)alkyl, (C₁-

C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical, it being understood that the radicals R₁₁ are carried by a carbon atom;

- i. the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical, it being understood that the radicals R₁₂ are carried by a nitrogen;
- j. R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;
- k. x is 0 or 1
 - i. (New) when x = 0, the linking arm D is attached to the nitrogen atom,
 - ii. (New) when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M; and
- l. Y is a counter-ion.

113. (New) The composition of claim 112, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

114. (New) The composition of claim 112, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a

(C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

115. (New) The composition of claim 112, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

116. (New) The composition of claim 112, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

117. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-) OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

118. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

119. (New) The composition of claim 99, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,
- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
- h. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
- i. [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
- j. {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- k. 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- l. 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- m. 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- n. 3-{3-[1-(5-trimethylsilyl-4-Amino-3-trimethylsilylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride
- o. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- p. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
- q. N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- r. N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
- s. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

- t. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- u. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
- v. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride
- w. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
- x. {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- y. 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- z. 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}1-methyl-3H-imidazol-1-ium chloride
- aa. 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- bb. [1-(4-Amino-3-trimethylsilylpropylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- cc. 3-[1-(4-Amino-3-trimethylsilylpropylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- dd. 3-{3-[1-(4-Amino-3-trimethylsilylpropylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- ee. [1-(5-trimethylsilylpropyl-4-Amino-3-trimethylsilylpropylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- ff. 3-[1-(5-trimethylsilylpropyl-4-Amino-3-trimethylsilylpropylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- gg. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- hh. 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- ii. 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- jj. 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- kk. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

- ll. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride
- mm. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride
- nn. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide
- oo. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,
- pp. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide
- qq. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate
- rr. [1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide
- ss. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide
- tt. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide
- uu. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide
- vv. [1-(4-Aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide
- ww. [1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide
- xx. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide
- yy. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride
- zz. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

120. (New) The composition of claim 99, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride;
- h. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- i. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
- j. N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride

- k. N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
- l. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- m. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- n. [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
- o. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- p. 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- q. 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- r. 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
- s. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- t. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride
- u. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride
- v. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide
- w. [1-(4-Aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,
- x. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide
- y. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate
- z. [1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide
- aa. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide
- bb. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide
- cc. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide
- dd. [1-(4-aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide
- ee. [1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide
- ff. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide
- gg. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride
- hh. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

121. (New) The composition of claim 99, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
- b. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
- c. N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
- d. N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
- e. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- f. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- g. [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
- h. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
- i. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
- j. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride
- k. 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride
- l. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride
- m. [1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide
- n. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,
- o. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide
- p. [1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate
- q. [1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide
- r. [1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide
- s. [1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide
- t. [1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide
- u. [1-(4-aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide
- v. [1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide
- w. [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide
- x. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride
- y. [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

122. (New) The composition of claim 99, wherein the cationic tertiary para-phenylene is chosen from the group consisting of

- a. [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
- b. 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- c. [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
- d. 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

123. (New) The composition of claim 99, wherein the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

124. (New) The composition of claim 99, wherein the pearlescent or opacifying agent is an uncoated titanium oxide in powdered form.

125. (New) The composition of claim 124, wherein the pearlescent or opacifying agent is an uncoated titanium oxide in the form of an aqueous dispersion of at least 10% by weight of titanium oxide relative to the total weight of the aqueous dispersion and having a particle size equal to 15 to 60 nanometers.

126. (New) The composition of claim 99, wherein the pearlescent or opacifying agent is a titanium oxide coated with a material chosen from polydimethylsiloxane, polymethylhydrogenosiloxane, perfluoropolymethyl isopropyl ether, silica, teflon, polyester, chitosan, N-lauryl-L-lysine.

127. (New) The composition of claim 99, wherein the titanium oxide has a particle size of between 2 and 500 nanometers.

128. (New) The composition of claim 127, wherein the titanium oxide has a particle size of between 2 and 300 nanometers.

129. (New) The composition of claim 127, wherein the titanium oxide has a particle size of between 2 and 50 nanometers.

130. (New) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from about 0.001 to about 10% by weight relative to the total weight of the composition.
131. (New) The composition of claim 130, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from about 0.005 to about 6% by weight relative to the total weight of the composition.
132. (New) The composition of claim 99, wherein the pearlescent or opacifying agent or agents represent from about 0.1% to about 1% by weight relative to the total weight of the composition.
133. (New) The composition of claim 99, further comprising at least one cationic polymer.
134. (New) The composition of claim 99, further comprising at least one thickening polymer.
135. (New) The composition of claim 99, further comprising at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.
136. (New) The composition of claim 99, comprising at least one additional oxidation base other than cationic tertiary para-phenylenediamines having a pyrrolidine ring chosen from para-phenylenediamines, bis-phenylalkylenediamines, para-aminophenols, ortho-aminophenols, heterocyclic bases and their addition salts.
137. (New) The composition of claim 136, wherein the additional oxidation base(s) are present in a quantity of between about 0.001 to about 20% by weight relative to the total weight of the composition.
138. (New) The composition of claim 137, wherein the additional oxidation base(s) are present in a quantity of between about 0.005 and about 6% by weight relative to the total weight of the composition.
139. (New) The composition of claim 99, further comprising at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.

140. (New) The composition of claim 139, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β -hydroxyethyloxy)benzene, 2-amino-4-(β -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1- β -hydroxyethylamino-3,4-methylenedioxybenzene, α -naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis(β -hydroxyethylamino)toluene and their addition salts.
141. (New) The composition of claim 140, wherein the coupler(s) are present in a quantity of between about 0.001 and about 20% by weight relative to the total weight of the composition.
142. (New) The composition of claim 141, wherein the coupler(s) are present in a quantity of between about 0.005 and about 6% by weight relative to the total weight of the composition.
143. (New) The composition of claim 99, further comprising at least one direct dye.
144. (New) The composition of claim 99, further comprising at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.
145. (New) The composition of claim 99, further comprising an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes.
146. (New) The composition of claim 145, wherein the oxidizing agent is hydrogen peroxide.
147. (New) A method for the oxidation dyeing of keratinous fibres, wherein a dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 10% by weight relative to the total weight of the composition of at least one pearlescent or opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, is applied to the fibres in the presence of an oxidizing agent.
148. (New) A multicompartiment device wherein the first compartment contains a dyeing composition comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, and about 0.05% to about 10% by weight

relative to the total weight of the composition of at least one pearlescent or opacifying agent chosen from coated or uncoated titanium oxides, mica-titaniums and micas, and a second compartment contains an oxidizing agent.